

XLVII.—*Winter Notes in Spain.* By ABEL CHAPMAN.

HAVING spent another winter in the Peninsula, I venture to submit the following accounts of my observations at that season, as supplementary to my former paper (*Ibis*, 1884, p. 66), which chiefly referred to the spring and summer in Andalusia.

Notwithstanding its usually fine winter climate, Southern Spain is hardly so rich in birds at that season as might be expected. The difference between its spring and winter avifauna is much more marked than the temperature and prevailing conditions would appear to render necessary. All the brilliantly plumaged southern forms have disappeared, for the Bee-eaters, Rollers, Golden Orioles, Hoopoes, and many others, which in summer lend quite a semi-tropical character to the Spanish avifauna, withdraw during the autumn months, and many of the Raptores, Sylviidæ, and Ardeidæ have also gone; while in a wet season—such as the winter of 1887–88 in Spain proved to be—the scarcity or absence of the wading birds is very remarkable.

Among the Spanish winter residents are several of our British summer visitors. In the beautiful gardens of my friend Mr. W. J. Buck, at Jerez, these were very numerous, and included Blackcaps, Willow Wrens, Chiffchaffs, and Wagtails, besides large flocks of Goldfinches, Green and Brown Linnets, Chaffinches, Siskins, Redpolls, Serin Finches, Great and Blue Tits, and Robins. The presence of many of these birds at the end of December amidst the brilliant evergreens of palm and pine, eucalyptus and pepper-tree, orange, olive and loquat, would have given a spring-like character to the gardens but for one circumstance—they were silent, and perhaps the only real winter songster was the Goldfinch, whose numbers in this land of thistles is legion, and their pretty warbling song incessant. On December 28th I observed a few Sand Martins (*Cotile riparia*) hawking in the sun at Vejer-de-la-Frontera, and during December, January, and February, Swallows (*Hirundo rustica*) were noticed on several occasions; but neither of these species winter regularly in Spain.

The blank left by the departure of the summer birds is to some extent filled by the arrival of the northern migrants; but it is in the nature of these to be always less conspicuous, and their presence may be entirely overlooked unless one goes to seek them in their own haunts. With my limited experience, it is impossible to give the dates at which the various steps in this transition from summer to winter conditions take place; but among the earliest signs I observed of the autumnal arrival on the Peninsular coast was the appearance of the Common Sandpiper (*Totanus hypoleucus*) in the early days of September, rapidly followed by a stream of allied species. *Limosa lapponica*, *Totanus canescens*, *Tringa canutus*, *T. alpina*, *Ægialitis hiaticula*, and others, together with Common Terns, Black-headed Gulls, &c., have come in force by the middle of September. On the 11th the Whimbrels (*Numenius phaeopus*) arrived, but only remained a month, or rather their transit occupied that period. The last I shot was on October 10th, after which date* none were seen till their return journey in May. Curlews (*Numenius arquata*), on the other hand, are very numerous all the winter; they arrive later than the Whimbrels, and depart in spring, before the latter have reappeared. Of the immense numbers of wading birds which throng the Iberian coasts and rivers during September and October, a very large proportion seem to pass on southwards, and comparatively few spend the winter in the Peninsula; at least that is the case in wet seasons, such as have been both the winters I have passed in the country.

Snipes and the bulk of the migrant Ducks seem to arrive during October. Our first day's Snipe-shooting was on October 22nd, when we got $17\frac{1}{2}$ couples, including some Jack-Snipe, besides several Golden Plovers, a Tufted Duck, and a couple of Teal. We observed a good many Mallard and some large packs of Wigeon, though the first of the latter actually obtained was on the 7th November. I also recollect shooting, on the same day, a single Turtle Dove (*Turtur communis*),

* On the same day I shot the first Golden Plover, a single bird; the bulk arrived a week or so later.

which rose from a patch of rushes adjoining the marsh. The Geese are rather later in appearing ; it is mid-November before the bulk of them are due.

The "marismas" of Southern Spain are the winter home of very great quantities of wild-fowl ; probably nowhere in Europe can natural conditions be found more congenial to their requirements than the vast shallow watery wildernesses which stretch along the Lower Guadalquivir. There, amidst abundant plant and insect-food, the Ducks and Geese can pass the colder months in comparative security ; and the hope of investigating the winter conditions of bird-life in these regions was one of the chief motives of my last journey—marred, unluckily, by the very wet season. For more than a fortnight in December the rain was incessant, obliterating all traces of roads or rivers, reducing the whole country to a swamp, and the valleys and low-lying lands to sheets of standing water. Our first glance showed the hopelessness of expecting to do much good with the wild-fowl, for the delta of the Guadalquivir was a vast inland sea of tawny water, extending to the horizon along the whole length of the Coto de Doñana and Coto del Rey. Yet, unfavourable as the season was, at times the massed bird-life was marvellous, considering that the fowl were scattered over some twenty leagues of unbroken water. In dry seasons, when they are restricted to such pools as then remain, it is not uncommon to see even the larger sheets of water, such as the Lagunas de Santa Olaya, packed with such swarms of Ducks, Divers, and Grebes of various kinds, as literally to hide the surface of the lake ; but under the adverse conditions of last winter, much hard work was necessary to form any acquaintance with the fowl, among which we spent some long days and nights. So far as our observations went, I would give the first place, as regards numbers, to the Pintails (*Dafila acuta*)—"rabudos" in Spanish ; but the Wigeon (*Mareca penelope*) were not far behind, both these species being seen in thousands daily. Next in abundance would come Teal (*Querquedula crecca*) and Shovellers (*Spatula clypeata*), for the Mallards (*Anas boscas*), though common enough, were not in any-

thing like the wonderful aggregations of the four first-named species, and were more inclined to frequent the rushy lagoons and smaller pieces of water than the open "marisma," where the others were mostly found.

When flight-shooting in the early mornings, Pintails, Wigeons, and Shovellers were by far the most numerous. The flocks of Shovellers seemed to come off the land, or from the rushy margins of the Doñana, and in an opposite direction to the course held by the other Ducks named. It was very interesting about dawn to watch the endless flights of Ducks and Geese, which in every direction lined the half-lighted skies, and the chorus of their wild notes was not less attractive. The Pintails are silent on flight, but keep up a constant confused sibilant chatter when on the water; the Shovellers make a spluttering sort of quack, less defined than that of the Mallard; and the note of the latter, with the gaggling of the Geese and Flamingoes, the piping whistles of Wigeon, Curlews, and many other wild-fowl, all blended in that matutinal concert. A few Tufted Ducks also appeared at morning flight—the only diving Ducks actually identified last winter, though I know that the Common Pochards and the White-fronted Ducks (*Erismatura mersa*) were also present on the open "marisma," and, I think, some of the White-eyed Ducks (*Fuligula nyroca*) as well. Of the handsome Red-crested Pochard we saw nothing, nor, at this season, of the Gadwall or the Garganey. The marsh-pools, I should perhaps add, are at all times rather too shallow exactly to suit the tastes of the diving Ducks. A pair of Sheld-ducks (*Tadorna cornuta*) were shot in January by a native fowler, and late in that month a small string of the Ruddy Sheld-duck (*Tadorna rutila*) passed near our half-hidden punts, but not within shot. This completes the list of the Duck-tribe which we were able to identify.

Next to the Ducks the most conspicuous winter wild-fowl of the "marisma" are the Grey Geese, which resort thither from November till February in very large numbers, and, so far as we were able to form an opinion, they appeared to be all *Anser cinereus*. They spend the night afloat and come

to the grassy shores and points of land at daybreak, flying inshore in small successive parties from the open water. There, if unmolested, they remain feeding, preening and washing in the shallows, or resting on the banks, all day. At the particular spots along the edge of the "marisma" to which, at dawn, the Geese thus resort, a few flight-shots may be obtained on a favourable morning; but the difficulty of shooting Wild Geese is proverbial, and these big Grey-lags are the hardest and most invulnerable of fowl. The Spanish wildfowlers use trained stalking-ponies, called "cabestros," for Ducks and—to a less extent—Geese are accustomed to the presence of the numerous half-wild ponies and cattle bred in the Bætican wilderness, and take little notice of their approach. It is curious that they should not observe the extra pair of legs; but the most cautious birds appear entirely to overlook such irregularities, and so long as the fowler allows no part of his figure to appear above the outline of the pony's back, no attention is paid to what may be in full view beneath. It was a singular experience to arrive thus, almost into the midst of such wary and suspicious birds as Pintail, Mallard, and Wigeon, many of which were frequently swimming quietly, calling or preening themselves, within 15 or 20 yards of our guns, while others passed and repassed close overhead.

Wild Swans we never saw, but one of our "pateros" (duck-shooters) told me he had shot two or three during a severe winter many years ago; he regarded them as very rare, and, indeed, did not know what they were until he took them to San Lucar for sale.

The comparative scarcity of the wading birds during wet seasons I have already noticed. During the many long days we spent behind our stalking-ponies on the shores of the "marisma," we hardly observed any variety of this class of birds. On a few occasions, chattering flocks of Black-winged Stilts (*Himantopus candidus*) were met with; the legs of the young were already pale pink, but the irides were still dark. On January 30th a very large pack of Avocets (*Recurvirostra avocetta*) were feeding on the oozy mud-flats outside the Palacio de Doñana, and the "pateros" assured me that they

had just arrived. Along the peculiar marsh-belt known as the Retuerta—the point at which the conflict between the blown sands from the Atlantic and the alluvial deposits of the great delta is being most keenly waged—were a good many Green Sandpipers (*Totanus ochropus*), invariably single birds and rather tame. At Santa Olaya I observed a small party of Kentish Plovers (*Ægialitis cantiana*) running along the sandy shores of the lagoon, and this species, with Dunlins and Ring Dotterels, also frequented the mud-banks of the Guadalquivir. On the night of January 27th, while riding along the “marisma,” we recognized the note of the Greenshank (*Totanus canescens*), and Redshanks (*T. calidris*) were plentiful enough on all the mud-flats and “salinas.” These, with Curlews and Plovers, almost complete the list of their class. The lack of Waders and of the pretty Little Egrets, Buff-backed and Squacco Herons, so conspicuous in spring, left rather a blank along the broad rushy confines of Doñana. The Spoonbills (*Platalea leucorodia*) were also absent, though, in Portugal, I remember observing them at intervals throughout the winter on the lagoons of the Vouga and elsewhere. Yet there was no actual deficiency of bird-life—it was quality rather than quantity that was wanting. The air was alive with Pewits and Plovers, small Gulls, Magpies and Jackdaws, Skylarks, Meadow Pipits, Wagtails, Common and Reed-Buntings, and similar species. Herons (*Ardea cinerea*) stood posted at intervals in the shallow water, and here and there a small party of Storks; while in the midst of all this bird-population, and apparently utterly unnoticed by them, the Marsh Harriers (*Circus æruginosus*) ceaselessly wheeled and circled. After watching them for hours, I have never seen them attempt to take a bird on the wing, or to pursue anything at all, though frequently pouncing upon something—I could not see what—among the rushes or shallow water. There the Harrier would remain with outstretched wings, struggling with some victim (perhaps a frog) for a few minutes, and then quietly resume his hunting. The Hen-Harriers (*C. cyaneus*) were unusually scarce; probably the season was too wet for their tastes, and the few I observed

were hunting over the drier plains of palmetto and cistus-scrub, and not in the "marisma." Montagu's Harrier (*C. cineraceus*), so common in spring, was entirely absent.

One winter's day, while vainly endeavouring to circumvent, by means of the "cabestro" ponies, the Geese, which, by the way, will rarely allow approach in this manner, we fell in with a pack of about forty Pintailed Sand Grouse (*Pterocles alchata*). I was wrong in assuming, in my last paper (Ibis, 1884, p. 84), that these beautiful birds are only spring migrants to Spain, for during last winter I observed them on different occasions in the plains of the Guadalquivir and the Guadalete. The birds in question were extremely shy and wild, defying our most careful attempts to approach, and after crouching along, bent nearly double, behind the pony for a couple of hours, my back and limbs paralyzed by the excruciating pain of the prone position, the end of the operations seemed as far off as ever. The "Gangas," however, had a strong fancy for that sandy spit (probably the only available resort left uncovered by the water), and, though not permitting approach, they never left us entirely, although at times they were almost out of sight, far up in the blue sky (we could hardly trace them, but for the harsh croak), then down they would drop direct, shooting to the earth like a shower of falling stars. At last a couple of raking shots added seven males and three females to our bag, some of the former already beginning to assume the black throat, but otherwise they were all more or less in winter plumage, the males having few or none of the pretty yellow spots on the back which characterize their spring dress, and both sexes were paler in tone than at the latter season. The carriage of these birds on the ground is very sprightly; they sit half upright, rather like a Pigeon. On our final, successful approach, we noticed many of them lying down on one side, nestling in the warm sand. Their flight resembles that of the Golden Plover, but the narrow black bordering on the under wing is conspicuous; at times, when high in air, they might almost be taken for Teal. As divergent opinions have been expressed with regard to the edible qualities of these Sand

Grouse, I may mention that we carefully tested these birds and found them excellent. Their flesh is dark, as tender and well-flavoured as that of a Grouse, and was equally good when cold. The Spanish name “Ganga,” as I mentioned in my former paper, signifies “a bargain.” As a coincidence, it may perhaps be admissible to add that, on the very morning after writing the above (May 30th), I received by post from my puntsman on the Northumbrian coast, a package containing a pair of Pallas’s Sand Grouse (*Syrrhaptes paradoxus*), shot the day before from a flight of sixty*.

On January 6th I again enjoyed a sight of my old friends the Camels. Our party were assembled for the mid-day “bocadillo” on the verge of the “marisma,” when these huge creatures were descried in the distance. There was a herd of nineteen, of all sizes, dreamily standing knee-deep in the water, and each form clearly reflected below. With our powerful field-glasses we could watch them putting their heads down to the water, as though to graze on something growing beneath its surface. Presently the herd moved slowly off to a small rush-grown island a mile or two from the shore, and there we were obliged to leave them to their ruminations. Hard by stood a very large flock of Flamingoes, the rosy sheen of their long solid ranks gleaming bright in the sunlight, and the intervening waters were dotted over in all directions with numerous packs of Geese and Ducks. Flamingoes appeared to remain on the Spanish side of the Straits all through the winter. There were plenty in the “marisma” in November, and the “guardias” said they still remained there in December. Immediately after the heavy rains at the end of that month, while riding through the “marismilla” forests, we observed, high over the pines, a large flight passing northwards, which were, most probably, in the act of crossing over from Africa. Their winter movements are certainly regulated by the quantity of water in the marshes.

One curious circumstance we noticed in the “marisma” was

* The Pallas’s Sand Grouse is hardly so well flavoured, and their flesh, on the *inner* part of the breast, is *white*, like that of a Blackcock.

the immense quantities of insects (small black gnats, or mosquitos) which lined its leeward shores. For league after league layers of tiny living creatures extended in unbroken succession; in width they would not be less than several yards, and they were often an inch or two thick. More than half of these living millions were floating on the water's edge, the rest were on the dry mud or sand, where one could pick them up in handfuls.

In the Coto de Doñana we had a prolonged campaign with large and small game during the early part of January. About half the time was spent among the open scrub-covered plains at the further extremity of that extensive preserve; thence we moved our quarters to the pine forests of the "marismilla," nearly opposite San Lucar. At first sight these fragrant woods appeared rather devoid of bird-life. We often rode for miles without seeing more than a few Ravens or a Kite; the latter always *Milvus ictinus*, for the Black Kite (*M. migrans*) is exclusively a summer visitor. Among the thick bushy tops of the stone-pines were numbers of small birds, which I had some difficulty in making out, as they were extremely shy, and it was, of course, not permissible when after deer &c. to fire at such small fry; but later, while waiting concealed in my "puestos" in the heart of the silent forest, I had opportunities of observing them, as they sent down small showers of pine-cone scales upon me. They were principally Hawfinches (*Coccothraustes vulgaris*), but there were also small parties of Crossbills (*Loxia curvirostra*) similarly employed. On two or three occasions, when our "drives" were finished before dark, I used the opportunity of trying to obtain some of the smaller forest-birds. But in this a singular difficulty occurred. In Andalucia the sun gives us an hour or two more of his company than on a winter's day at home. All day long he shone in a blue and cloudless sky; but almost as soon as his rim sank behind the distant pines it was dark, and the nocturnal concert of frogs and Owls commenced. The transition from day to night is startlingly sudden, twilight only lasting a few minutes. The feathered race is well aware of this, and provide for the event

by going to roost a full half-hour before sunset. One of the first signs of approaching night is the flight of the Ravens. Perhaps one has not realized the fact that the day is far spent, and is reminded of it by their dark files slowly crossing the sky towards their roosting-places while it is yet broad daylight. The same habit is observable with the smaller birds. For the last half-hour of the day none can be seen, and when one eventually finds their retreat, they are buried in the deepest recesses of the pines; hence these half-hours at dusk produced but little. Among other birds obtained were the Missel Thrush, Black Redstart, Robin, and other common species. One evening, while wandering among the pines, a Buzzard dipped down from a lower branch and silently sped away, till a shot in the wing brought him down. This was a remarkably pale example, the whole plumage being of a warm cream-colour, slightly mottled and splashed above with dusky brown; irides dark, and claws white. My brothers obtained Buzzards in somewhat similar plumage in Germany (adults, shot at the nest) in the spring of 1878, but I never before met with the variety in Spain, the Spanish type being generally dark. Another fine species met with among the pines was the Eagle Owl (*Bubo ignavus*); and once, while posted for a "drive" in the remote and isolated "mancha" of Salivar, one of these great birds came straight for my position, gliding beneath the dark trees and sweeping close over my head. I may perhaps be allowed to mention that the results of this "caceria" included 27 stags and 5 wild pigs, besides several hundred heads of small game and wild-fowl. Four lynxes were bagged during the season, as well as foxes, badgers, &c. The sand-wastes in the neighbourhood of such wild spots as the Salivar and other isolated "manchas" are traversed in every direction with the tracks of lynx, wild cat, ichneumon, and badger, besides those of "game" and the rectilineal footprints of the Stone Curlew. The Spanish red deer differ from the Scotch type in the absence of the rough hairy mane; some of the heads obtained were remarkably fine for forest-deer, the best having fifteen points, though not a very large animal, and several others were "royals,"

and, among others, two heads of thirteen and eleven points respectively, form part of my collection.

Leaving the pine-region for the more open scrubby plains towards the west, where the cistus and tree-heath, broom and giant heather, with lentiscus and many another evergreen, grow in the wildest luxuriance, we had a different set of birds. Here, though we got a few deer and B. shot an enormous old boar, the chief game were Red-legged Partridges, Snipe, and Quail; the latter were not, of course, numerous at this season, and only a single specimen of the Andalucian Quail (*Turnix sylvatica*) was obtained. Quite the most numerous inhabitant of the scrub was the Magpie, which sat about in hundreds; clouds of Common Starlings gyrated over the plains, and every grove of cork-trees was occupied by the Spanish Green Woodpeckers (*Gecinus sharpei*), the crops of which contained ants and sand. I observed one Lesser Spotted Woodpecker (*Dendrocopus minor*), and the Southern Grey Shrikes (*Lanius meridionalis*) everywhere mumbled their harsh scolding notes from a dead branch or tall shoot of cistus. Little Owls (*Athene noctua*) frequently fluttered up from the scrub, and Short-eared Owls (*Asio accipitrinus*) were so abundant that we often had five or six on wing at once before our line.

Fantail Warblers (*Cisticola schænicola*) frequented the "juncals" or rushy margins of the lagoons, where in spring they breed. I also recognized in these spots a few Cetti's Warblers (*Cettia sericea*), and saw others which I failed to identify, besides an occasional flock of Crag Martins (*Cotile rupestris*) and a stray Swallow. The lagoons at Zopiton and elsewhere swarmed with Coots; there were also a few Grebes (*Podiceps nigricollis*) and Dabchicks. Packs of Stone Curlew hovered well out of shot; while of small birds the Black Redstart, Wagtails (Grey, Yellow, and White), and hosts of Larks were the most noticeable. One day a large Falcon made several stoops at the Partridge which were rising before us, and at last, having turned a hare, drove her right back upon our line, when pursuer and pursued fell to a right and left. This proved to be an example, in the first

year's plumage, of the small race of Peregrine, *F. minor* or *F. puniceus*, the upper coverts broadly margined with chestnut and striated below. The crop contained about a score of "lisos" (I believe, blind worms)—surely a singular prey for a noble Falcon! We observed Falcons, probably of the same species, on other occasions, and also obtained a Sparrow-Hawk.

One of the most interesting and characteristic spectacles of a wet winter in the Coto de Doñana are the Vultures. Almost daily we saw assemblages of these birds gravely holding a sort of inquest on the remains of the numerous cattle and horses that had died of cold or disease, or had been drowned by the inundation of the "marisma." As many as thirty or forty tawny Griffons (*Gyps fulvus*) would be gathered around a carcase, while others sat gorged on the trees or enjoyed a digestive nap on some sand ridge hard by; but however sleepy they appeared, they were alert enough to detect any attempt to approach them. At a certain spot on the Retuerta, where the huge sand-hills almost attain the dimensions of mountains, a large flock of Griffons was always posted, apparently to take advantage of the extensive view over the plains. On two or three occasions we also met with the Black Vulture (*Vultur monachus*). This species is of far nobler aspect than the Griffon, showing in life none of the repulsive bare neck of that bird, and has a majestic appearance on the wing. I must admit to mistaking the first pair seen (January 4th) for the largest Imperial Eagles I had ever met with. My host B. had always held that the Imperial Eagles I shot here in 1883 were small specimens, and that there existed in the Coto Eagles of much greater size. I was extremely anxious to secure one of these aquiline monsters, and when one of the above-named pair, after an almost endless series of aerial gyrations, settled far away on the top of a wild olive-tree, I left the shooting-party and went in pursuit. By means of one of the trained ponies, I eventually got to within some forty yards, and at that distance a charge of s.s.g. brought the huge bird to the ground; the great wings, however, never ceased to work, and despite

another dose of mould-shot, the Vulture quickly recovered, and flew slowly and low to the edge of the marisma, a mile away. On our second approach he was lying stretched flat on the short grass, yet rose again, and after receiving two more cartridges at pistol-range, flew a quarter of a mile before falling dead. Subsequently I had a similar experience with another; it seems all but impossible with a shot-gun to kill these huge *Raptores* outright; their hard muscular frames and thick sinews, tough as steel wire, appear impervious to shot, and unless a pellet chances to take the wing-bone, they will go on, though struck in a dozen places. This bird proved a magnificent specimen, a male, measuring 9 feet 9 inches across the wings. The irides were dark, legs and feet whitish, and claws black; cere and bare skin in front of neck bluish colour; tail pointed. It had no offensive smell. The whole plumage deep black-brown, the head covered with downy feathers of the same hue. As already mentioned, the bare part of the neck during life is entirely hidden by the ruff of long lanceolate plumes which surrounds it.

The Spanish Imperial Eagle (*Aquila adalberti*) is now a comparatively scarce bird in this region; twenty years ago it bred here quite commonly, but I only observed a single adult during the two expeditions I made to the Coto de Doñana last winter. This one was engaged in a skirmish with two large tawny-coloured Eagles, perhaps its own offspring. The latter were numerous, some of them as pale and washed-out looking as the Griffons, others—less common—of a rich bright chestnut-colour, very handsome objects as they sat on some tall tree in the sunshine. The question of the specific distinction of the large tawny-coloured Eagles of Southern Europe is, I know, a knotty problem, demanding far more experience than mine; but I may, perhaps, narrate the following experiences as tending to show the existence in Spain of a large tawny-coloured Eagle of well-marked specific identity, and distinct from the immature *A. adalberti*. In April 1883, I found a nest of one of these large Eagles on a stone-pine in the Coto de Doñana, and I distinctly saw the old bird as she rose from the nest, about 100 yards away.

The place was remote, and the night too near to allow of my then awaiting her return (though I *should* have done so at any cost!); so, after taking the two eggs, substituting for them a couple of hard-boiled hen's eggs, and setting a large circular steel trap in the nest, I left it. On returning next morning there was no sign of the Eagle at the nest. After walking all round, shouting out, and going up an adjacent sand-ridge, which all but overlooked the nest, I was satisfied she was not there, especially as the night before she had risen rather wild. Accordingly we prepared to ascend; but whilst throwing the ropes over the lowest branches, a great shadow suddenly glided across the sand beside me, and on looking up there was the great chestnut-coloured Eagle slowly flapping from her nest within 15 or 20 yards overhead. Before I could drop the rope and clutch my gun the chance was gone; unluckily, however, the shot took some effect, and though it failed to stop the bird, she went away badly struck, with one leg hanging down, and never returned. Thus, by bad luck, this chance of settling a doubtful point was lost. In June of the same year (1883) we obtained a Tawny Eagle, which I imagined would be a young Imperial of the year, and being only winged, the bird was placed in the garden at Jerez, where it lived till the early autumn of 1885. It was then (at any rate) $2\frac{1}{2}$ years old, and possibly much older, yet it had never changed colour at all. The whole plumage was rich tawny chestnut, rather lighter beneath, and the new autumn feathers, which were growing at the time of the bird's death, were also coming bright chestnut, and without a sign of black. This Eagle, which I now have set up, has also, to my eye, quite a different physical type from *A. adalberti*, old or young, being heavier and more massive in build, beak, and claws—indeed almost vulturine. The middle toe appears to have four scutes, against six (one rudimentary) in *A. adalberti*; tail above uniform dark brown. As already mentioned, I observed these rich tawny-coloured Eagles on several occasions during last winter in Spain. The forest-guards distinguished them from the young Imperial Eagles, and said they were most numerous in winter, though

they had known of their nesting occasionally. Casual observation is not, of course, of much value upon fine points, but I give their opinion for what it may be worth.

In the "campina" surrounding the city of Jerez were many interesting birds. Bustards, both the great "Abutarda" and the little "Sison," as usual, were in plenty on the open corn-lands. These great brown expanses of rolling country, at this season, look hungry and barren in the extreme, and in the entire absence of covert we did not attempt to molest the Bustards. Storks (*Ciconia alba*) also frequent the "campina" in winter, and almost daily we observed flights of Cranes passing over in gagging skeins, or sedately stalking about the broad stretches of growing corn and *garbanzos*. In the marshy valleys of Catalana and the Albaladejo, near Jerez, the Snipe and Golden Plover were congregated in thousands; the Snipe actually sitting on the tops of the grass-tufts, which alone showed above water. The only other birds observed here were Little Bustards, Curlews, Pewits, and Marsh Harriers. On the barren lands, sprinkled with dwarf iris, stones, and the bleached skeletons of enormous thistles, were swarms of Goldfinches, Sky-, Calandra-, and Crested Larks, Buntings, Stonechats, and Pipits, with Kestrels in attendance. At a Coto in the neighbourhood of Jerez, I found my old companion of 1883, Felipe, established as keeper. His preserve, a range of low rolling hills of gravelly soil, thickly overgrown with lentiscus and palmetto, produced a few Partridges and great numbers of rabbits; and Felipe assured me that during November and December so many Eagles came to feed on the latter, that he had killed over thirty the previous year. By the middle of January they had mostly retired to the Sierras to breed, and, he added, they were nearly all Golden and Bonelli's Eagles ("Aguila perdicera," he called the latter), with a few Short-toed Eagles (*Circæus gallicus*) early in the autumn. The latter species—preying chiefly on snakes and large lizards, most of which hibernate—appears to leave that part of Spain in winter; but I noticed a few of both reptiles during my visit, and some of their persecutors may also remain, though I saw none. Many of the

Raptores which are so conspicuous in spring are entirely absent in winter ; such as the Booted Eagle, Egyptian Vulture, Black Kite, and Montagu's Harrier, none of which I saw, and but very few of the Lesser Kestrel, which in spring so abounds about the ruins of the old Moorish towers and in the streets of Jerez and Seville. A few days after my visit to Felipe, he rode in with a cargo which sorely puzzled the officials of the "consumos" (octroi), for under either arm he bore an Eagle, and in a sack on his back were two immense wild cats ! The Eagles were *A. chrysaëtus* and an immature tawny-breasted *A. bonelli*.

Towards the end of January I paid a visit to the sierras, a forty-mile ride eastward of Jerez. I had hopes of finding an eyry of the Bearded Vulture, though these were not destined to be fulfilled. Nothing but the usual Spanish birds, already named, were observed in our long ride, and on the evening of the 22nd I put up at the "cortijo" of a hospitable hill-farmer. Among the miscellaneous crowd gathered round the blazing logs was a birdcatcher who had been plying his vocation in the adjacent woods of the sierra ; he brought me a Great Spotted Woodpecker, and among two dozen "zorzales" (Thrushes) which I bought for dinner for my men and myself, I was surprised to find six or eight Redwings. The birdcatcher was quite aware of the migratory habits of the Song Thrush in Spain, saying they were "pajaros de entrada," which disappeared when the Swallows came ; but he saw no difference between them and the Redwings. The Blackbird, on the other hand, is resident and breeds in Andalucia. Both species, with Missel Thrushes and several common Finches and Tits, were plentiful in these woods, and the Redwing fairly numerous. I also observed here the Tree-creeper and several Cushats and Jays, the latter a species which, strange to say, I had not previously met with in Spain. The Choughs, on the other hand, were not present in their usual spring haunts at this season. About the small clearings or patches of corn-land in the sierras the Corn Buntings had already commenced to sing, though on the plains they were still silent. We spent some days searching the stony heights of the

sierras for an eyry of the Bearded Vulture, but, though we found plenty of nesting-places of the Griffon, we could see nothing of the more coveted prize. The Griffons were busy building their nests with big living branches of oak and olive, and claws full of grass torn up by the root. We watched them gathering and carrying these materials from places where charcoal-burners had been at work, and examined several nests; but none, of course, contained eggs so early as January.

Very few birds were observed on these barren mountain-tops. On the knife-edged ridge of the Sierra de las Cabras, where the white rocks project in abrupt vertical strata, were several of the Blue Rock Thrush, or "Solitario," and I was rather surprised to see also the Black Chat (*Saxicola leucura*), which I had imagined was purely a spring migrant. Among the scrubby brushwood lower down the hill-side, the characteristic species was the little Dartford Warbler, a bird of such intensely tame and skulking habits, that it is impossible to get a shot beyond three or four yards, which involves annihilation. Another Warbler observed in the valleys of the sierra was *Sylvia melanocephala*, but not commonly, it being more numerous in the aloe- and cactus-hedges about Jerez and the vine-country. After some hardish work and rough mountain-riding, I was obliged to return to Jerez; and then, within half an hour of paying off my guides, while riding through the chasm of the Boca de la Foz, we at length desiered a Bearded Vulture. The splendid bird continued slowly sailing overhead for some minutes, and eventually appeared to enter a high range of crags which I have before mentioned in 'The Ibis.' I had made up my mind to spend another night there (though we had neither food for man nor beast), when the great bird reappeared, and after treating us to another long and excellent view, winged its way in the direction of the distant and loftier sierras towards Grazalema and Ronda. I had never before enjoyed so good an opportunity of observing this fine bird in life, and was much surprised with the general contour, which was less falcon-like, and far more vulturine, than I had expected. The wings

are certainly quite as heavy, and as broad at the points, as those of the Griffon, but when the bird is circling they show rather more curve at the shoulder; a light spot towards the ends of the quills, the warm reddish breast, and the white head were very conspicuous from below. The form, however, was that of a Vulture; though this bird is at once distinguished from any other species by its tail, which is very long and continues broadening out for fully half its length, from which point it narrows away to the sharp cuneate tip.

This completes my winter's notes, for a subsequent expedition to the marisma produced nothing more of novelty or interest than has already been described. The results, I am painfully aware, are meagre, in view of the ornithological wealth of Southern Spain, and the exceptional opportunities which, through the kindness of my friends in Jerez, I have enjoyed for its exploration. The adverse weather is an extenuating circumstance; and in Spain a wet season signifies more than words can convey, creating obstacles and difficulties which must be seen to be believed.

XLVIII.—*On the Birds of Lomas de Zamora, Buenos Aires, Argentine Republic.* By FRANK WITHINGTON.
With Notes by P. L. SCLATER*.

LOMAS DE ZAMORA is one of the many subdivisions, or Partidos, as they are here called, into which the Province of Buenos Aires is divided. It is some eight square leagues in area, consisting of more or less rich and fertile pasture lands, and, with the exception of an almost imperceptible undulation

* [Mr. Withington has most kindly placed at my disposal the specimens upon which these notes are based. They are 150 in number, and are referable to 92 species. I have inserted the scientific name of each species, according to the numbers attached to the specimens in Mr. Withington's MS., and have appended a few notes where necessary.

As might have been expected, most of the species are well known inhabitants of this district, but there are several of much interest, *e. g.*, *Agriornis striata*, *Pachyrhamphus polychropterus*, *Coccyzus americanus*, *Buteo swainsoni*, and the typical form of *Falco peregrinus*.—P. L. S.]